

Hence, this is the first occurrence of *R. laevis* not only from coastal West Bengal, but from the entire east coast of India.

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17. FISHES OF CHIMMONY AND PEECHI-VAZHANI WILDLIFE SANCTUARIES, KERALA, INDIA

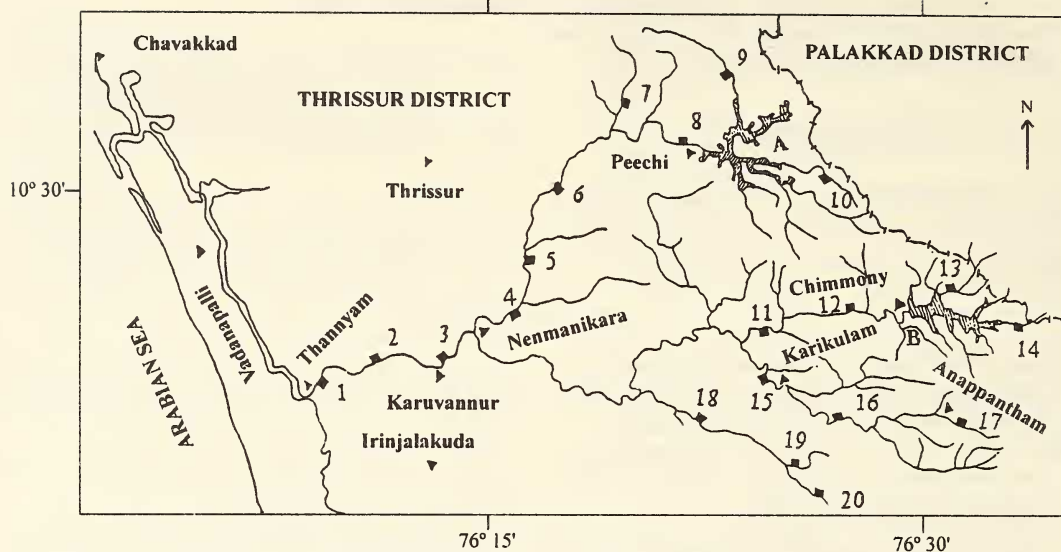
(With one text-figure)

The Western Ghats immediately south of the Palghat gap are topographically complex and among the most heterogeneous areas in the entire Western Ghats with regard to bio-climatic zones, forest vegetation and endemic species (Nair 1991). Only by taking into consideration the complex topography of Parambikulam, Peechi-Vazhani and Chimmony Wildlife Sanctuaries in Kerala with the adjacent Anamalai Wildlife Sanctuary in Tamil Nadu can the full potential of this tract be realized. The fish fauna of Parambikulam Wildlife Sanctuary was reported by Biju *et al.* (1999). So far, nobody had studied the Peechi-Vazhani and Chimmony Wildlife Sanctuaries. The present survey indicates the diversity of the fish fauna in these Sanctuaries.

Chimmony Wildlife Sanctuary: The Chimmony Wildlife Sanctuary is situated in

Mukundapuram taluka in Thrissur district (10° 22'-10° 29' N and 76° 25'-76° 34' E). This Sanctuary is a stretch of forest comprising of mainly evergreen forests, moist teak forests and moist mixed deciduous forests. The Chimmony Sanctuary, along the southwestern flanks of the Nelliampathies contiguous with and further south of Peechi extending east to Parambikulam, was declared as a Wildlife Sanctuary in August 1984. The Sanctuary area ranges in altitude from 50 to 1,116 m above msl (Nair 1991). The Chimmony Sanctuary is separated from the Parambikulam Sanctuary to its east by a stretch of forest along the catchment area of Kannankuzhithodu in Kodassery Reserve Forest.

Peechi-Vazhani Wildlife Sanctuary: The Peechi-Vazhani Sanctuary lies in Thrissur and Thalappilly talukas of Thrissur district (10° 28'-10° 40' N and 76° 17'-76° 29' E) (Nair 1991).



Collection sites:

- | | | | |
|------------------|-----------------|-----------------|----------------|
| 1. Kilupillikara | 7. Pattikad | 13. Virakuthoda | 19. Kurumala |
| 2. Inchamudi | 8. Cheenakadavu | 14. Payambayar | 20. Viranchira |
| 3. Karuvannur | 9. Puvanchira | 15. Kundai | Reservoirs: |
| 4. Manali | 10. Olakara | 16. Karikadavau | A. Peechi |
| 5. Trikur | 11. Anaipadam | 17. Anappantham | B. Chimmony |
| 6. Murkinikara | 12. Inchipara | 18. Munnumuri | |

Fig. 1: Map of Karuvannur river showing various collection sites and reservoirs

This Sanctuary consists of parts of Paravattanimala Reserve, Machadmala Reserve and Bharanipachamala Reserve. The total area of the Sanctuary is 125 sq. km and is drained by Manali tributary of Karuvannur river (Peechi part) and Kechery river (Vazhani part). Two irrigation projects in the Sanctuary receive water from Peechi and Vazhani Reservoirs. The Peechi-Vazhani Wildlife Sanctuary has all the diversity and complexity of the Western Ghats gene resources. The vegetal spectrum ranges from truly evergreen patches to vast tracts of moist deciduous and semi-evergreen forests. The Sanctuary also contains some monoculture areas of teak plantations. The altitude varies from 30 to 928 m above msl. The highest peak inside the Sanctuary is Ponnudi which is a trijunction of Palakkad, Mukindapuram and Thrissur talukas.

The endangered Nilgiri tahr found in the Ponnudi area and peacock are the main attractions within the Sanctuary area. The temperature ranges between 15 °C (during winter in hilly areas) and 38 °C (during summer in lowland areas).

Fish samples were collected from January 1997 to July 1998 from different localities in the streams and lakes. Fishes were collected mainly by using gillnets and cast nets. For collecting small fishes, a rectangular net with weighted edges was employed. Fishes were identified by visual observation and also in the laboratory. For laboratory identification, fishes were preserved in 10% formalin. Fishes were identified by referring to Day (1878), Jayaram (1981), Datta Muni and Srivastava (1988), and Talwar and Jhingran (1991).

Fish fauna: The systematic list of species is given below:

I Family: Anguillidae

1. *Anguilla bengalensis* (Gray)

II Family: Cyprinidae

2. *Catla catla* (Hamilton)
3. *Cirrhinus mrigala* (Hamilton)
4. *Cyprinus carpio communis* Linn.
5. *Labeo rohita* (Hamilton)*
6. *Puntius amphibius* (Val.)
7. *P. arulius* (Jerdon)*
8. *P. filamentosus* (Val.)
9. *P. melanampyx* (Day)
10. *P. sarana subnasutus* (Val.)
11. *P. ticto* (Hamilton)
12. *P. vittatus* Day
13. *Danio aequipinnatus* (McClelland)
14. *D. malabaricus* (Jerdon)
15. *Parluciosoma daniconius* (Hamilton)
16. *Garra mullya* (Sykes)

III Family: Balitoridae

17. *Nemacheilus guentheri* Day
18. *N. triangularis* Day

IV Family: Cobitidae

19. *Lepidocephalus thermalis* (Val.)

V Family: Bagridae

20. *Mystus armatus* (Day)
21. *M. malabaricus* (Jerdon)
22. *M. oculatus* (Val.)

VI Family: Siluridae

23. *Ompok bimaculatus* (Bloch)
24. *Wallago attu* (Schneider)

VII Family: Claridae

25. *Clarias batrachus* (Linn.)

VIII Family: Heteropneustidae

26. *Heteropneustes fossilis* (Bloch)

IX Family: Belontiidae

27. *Xenentodon cancila* (Hamilton)

X Family: Aplocheilidae

28. *Aplocheilus lineatus* (Val.)

XI Family: Ambassidae

29. *Parambassis thomassi* (Day)

XII Family: Cichlidae

30. *Etroplus maculatus* (Bloch)
31. *Oreochromis mossambica* (Peters)

XIII Family: Gobidae

32. *Glossogobius giurus* (Hamilton)

XIV Family: Channidae

33. *Channa marulius* (Hamilton)
34. *C. orientalis* Bloch & Schneider**
35. *C. punctatus* (Bloch)**
36. *C. striatus* (Bloch)*

XV Family: Mastacembelidae

37. *Mastacembelus armatus* (Lacepede)

[* Recorded only from Peechi-Vazhani,

** Recorded only from Chimmony]

The present survey indicates the rich fish fauna in Chimmony and Peechi-Vazhani Wildlife Sanctuaries. A total of 37 species, belonging to 15 families, were collected from these Sanctuary areas. Of the 37 species collected, *Cyprinus carpio communis*, *Labeo rohita*, *Puntius arulius* and *Channa striatus* were recorded only from Peechi-Vazhani Sanctuary area, while *Channa orientalis* and *C. punctatus* were restricted to Chimmony Sanctuary. Four species were culture fishes, namely *Cyprinus carpio communis*, *Labeo rohita*, *Catla catla* and *Cirrhinus mrigala*. Most of the other species are widely distributed in Kerala and other parts of the Western Ghats. *Puntius filamentosus*, *P. melanampyx*, *Parluciosoma daniconius* and

Garra mullya were collected mainly from the streams adjacent to the reservoir. January 25, 1999

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18. NEW RECORDS OF FISHES FROM THE WESTERN GHATS OF MAHARASHTRA

During studies on fish diversity in the Western Ghats streams and rivers in Maharashtra under the Western Ghats Biodiversity Programme, we collected *Silurus wynaadensis*, *Puntius bimaculatus*, *Puntius conchoni* and *Hypselobarbus dubius* from various streams and rivers. Recently, we recorded *Salmostoma sardinella* from Mondai stream and *Stigmatogobius oligactis* from Dhom reservoir as new records from Maharashtra and India respectively (Arunachalam *et al.*, 1999a,b). However, on further studies, we found four more species as new records from Maharashtra.

The above-mentioned fish species have not been recorded by earlier workers: Day (1868), Hora and Misra (1942), Suter (1944), Kulkarni

and Ranade (1974), Jayaram (1981, 1991), Talwar and Jhingran (1991), Ghate and Pawar (1992) and Menon (1992).

Silurus wynaadensis Day

This species was originally described by Day (1873, 1878) in Wynaad, Kerala state (erstwhile Travancore). We collected one specimen from Mondai stream, which arises in the Mandhardevi hill ranges and meets the River Neerar. The fish was collected 1 km from Shirrai in Satara district. Bhimachar and Rau (1941) recorded this species from Jagger valley in Karnataka in the Cauvery and Tungabhadra river systems. Rajan (1955) reported this species from